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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/518,995

12/21/2004

Junbiao Zhang

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EXAMINER

ANDRAMUNO, FRANKLIN S

ART UNIT

PAPER NUMBER

2623

MAIL DATE

DELIVERY MODE

01/24/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/518,995

Applicant(s)

ZHANG ET AL.

Examiner

Franklin S. Andramuno

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/21/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/21/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 and 8 are rejected under 35 U.S.C. 102(e) as being unpatentable by Reynolds et al (US 2004/0045030 A1). Hereinafter referred as Reynolds.

Regarding claim 1 and 8, Reynolds discloses a system and method for downloading and displaying a video program (**Live Video (210) in figure 2**) using a mobile terminal in an interworking environment (**Live Buffer (215) in figure 2**) that includes a first radio access network having a first data transfer rate (**MS player 32 Kb in figure 2**) and a second radio access network having a second data transfer rate that is faster than the first data transfer rate (**MS player 100 Kb in figure 2**), the method comprising the steps of: downloading, through the first or second radio access networks, the video program at respective first and second data transfer rates (**figure 3**), the video program being downloaded at the second data transfer rate when the mobile terminal is in the coverage area of the second radio access network (**Mobile phone (810) in figure 8**); displaying the downloaded video program at a predetermined playback rate (**Figure 9**); buffering excess portions of the downloaded

video program that result when a rate at which the video program is downloaded exceeds the predetermined playback rate (**Live Buffer Cache (310) in figure 3**); calculating a third data transfer rate, which is lower than the first data transfer rate, in response to the predetermined playback rate (**Real Player 40 Kb in figure 2**), the buffered excess portions and the time duration of the remainder of the video program; and negotiating, with the first access network, the third data transfer rate for downloading the video program, when the difference between the first and third data transfer rates exceeds a threshold level (**Message to cellular customer in cell 2 (904) in figure 9**).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-7 and 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reynolds et al (US 2004/0045030 A1) in view of Keaney et al (US 2006/0176968 A1). Hereinafter referred as Reynolds and Keaney.

Regarding claim 2 and 9, Reynolds discloses the system and method of claim 1, wherein the third data transfer rate is equal to $R_p - B_{sub.t}/T$ where R_p is the predetermined playback rate, $B_{sub.t}$ is an amount of the buffered excess portions of the downloaded video program, and T is a time duration of the remainder of the video

program to be played back (**page 11 paragraph (0081)**). However Reynolds fails to **disclose** that the buffered portion of the downloaded video is taken into account into the formula. Keaney teaches in (**page 6 paragraph (0082)**) of the rate buffer block (514) the rate of the transmission takes into account the buffer of the remainder packets.

Therefore, it would have been obvious at the time of the invention to modify Reynolds teachings to include the use of the buffer block to calculate a new data rate. This is a useful process when determining new data rates when moving from different cells. This is also a useful process when transmitting video over the internet and adjusting the rate according to congestion.

Regarding claim 3 and 10, Reynolds discloses the system and method of claim 1, further comprising the step of continuing to download the video program from the first radio access network using the third data transfer rate when the mobile terminal leaves the coverage area of the second radio access network and is within the coverage area of the first radio access network (**page 26 paragraph (0237)**).

Regarding claim 4 and 11, Reynolds discloses the system and method of claim 1, wherein the negotiating step is performed when the mobile terminal is within the coverage area of the second radio access network (**Adjusting the degree of compression to compensate (page 27 paragraph (0238))**).

Regarding claim 5 and 12, Reynolds discloses the system and method of claim 1, wherein the negotiating step is performed after the mobile terminal leaves the coverage area of the second radio access network (**The act of passing off the**

communication results in a backhaul channel from the previously active cellular transmitter to a central office for forwarding to a newly active cellular transmitter (page 27 paragraph (0237) lines 1-4).

Regarding claim 6 and 13, Reynolds discloses the system and method of claim 1, wherein the first radio access network is a 3G cellular network (**Network (220) in figure 2**).

Regarding claim 7 and 14, Reynolds discloses the system and method of claim 1, wherein the second radio access network is a Wireless Local Area Network (WLAN) (**Wired or wireless in figure 7**).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Franklin S. Andramuno whose telephone number is 571-270-3004. The examiner can normally be reached on Mon-Thurs (7:30am - 5:00pm) alternate Fri off (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571)272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/518,995
Art Unit: 2623

Page 6

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


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